AMENDMENTS TO CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

1.   (Currently Amended) A remote diagnostic unit for use with a heavy vehicle, comprising:

a pin connector communicating with a data bus on the vehicle, the pin connector receiving a signal from the data bus;

5   a microcontroller receiving and interpreting a standard diagnostic message from an ECU on an associated vehicle as a function of the signal received by the pin connector; [[and]]

a plurality of lights controlled by the microcontroller as a function of the standard diagnostic message; and [[message.]]

10   a reset switch, communicating with the microcontroller, for at least one of clearing the diagnostic message from the ECU and causing the ECU to enter a self-configuration mode.

2.   (Original) The remote diagnostic unit as set forth in claim 1, wherein the microcontroller includes a UART.

3.   (Cancelled)

4.   (Currently Amended) The remote diagnostic unit as set forth in claim 1, wherein the diagnostic message indicates a status of the ECU. an ABS ECU on the vehicle.

5.   (Original) The remote diagnostic unit as set forth in claim 1, wherein the data bus is a J1587 serial data bus, further including:

a plurality of the pin connectors for communicating with the J1587 serial data bus.

6.   (Original) The remote diagnostic unit as set forth in claim 1, further including:

a signal conditioner, between the pin connector and the microcontroller, for conditioning the signal received by the pin connector into the standard diagnostic message, which is interpreted by the microcontroller.

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7.   (Original) The remote diagnostic unit as set forth in claim 6, wherein the signal conditioner is an RS485 device.

8.   (Original) The remote diagnostic unit as set forth in claim 1, wherein the microcontroller is a PIC16F870 device.

9.   (Original) The remote diagnostic unit as set forth in claim 1, wherein the lights include light emitting diodes.

10.   (Currently Amended) A remote diagnostic communication interface for use with a heavy vehicle, comprising:

a pin connector communicating with a data bus on the vehicle, the pin connector receiving a signal from the data bus;

5   means for conditioning the signal and producing a standard diagnostic message as a function of the signal;

means for receiving and interpreting the standard diagnostic message; [[and]]

a plurality of lights being selectively illuminated as a function of the standard diagnostic message; and [[message.]]

10   a reset switch, communicating with the means for receiving and interpreting the standard diagnostic message, for at least one of selectively clearing an ECU on an associated vehicle and selectively causing the ECU to enter a reconfiguration mode.

11.   (Original) The remote diagnostic communication interface as set forth in claim 10, wherein the means for conditioning includes an RS485 device.

12.   (Original) The remote diagnostic communication interface as set forth in claim 10, wherein the means for receiving and interpreting the standard diagnostic message includes a UART.

13.   (Original) The remote diagnostic communication interface as set forth in claim 12, wherein the means for receiving and interpreting the standard diagnostic message includes a PIC16F870 device.

14.   (Original) The remote diagnostic communication interface as set forth in claim 10, wherein the pin connector communicates with the data bus via a vehicle connector.

15.   (Cancelled)

16.   (Currently Amended) The remote diagnostic communication interface as set forth in ~~claim 15,~~ claim 10, wherein:

the reset switch is activated in response to a magnet;

the ECU is cleared when the reset switch is activated for a first period of time; and

the ECU enters the reconfiguration mode when the reset switch is activated for a second period of time.

17.   (Original) The remote diagnostic communication interface as set forth in claim 10, wherein:

the lights are light emitting diodes; and

the standard diagnostic message indicates a fault status of an associated ECU.

18.   (Currently Amended) A system for diagnosing an electrical system on a heavy vehicle, the system including:

an electronic control unit;

a data bus communicating with the electronic control unit; and

5   a remote diagnostic unit, including:

a pin connector;

a microcontroller receiving and interpreting a standard diagnostic

message from an ECU on an associated vehicle as a function of the signal

received by the pin connector; [[and]]

10   a plurality of lights controlled by the microcontroller as a function of the

standard diagnostic message; and [[message.]]

a reset switch, communicating with the microcontroller, for one of

clearing the diagnostic message from the ECU and transmitting a self-

configuration command to the ECU.

19.   (Cancelled)

20.   (Original) The system for diagnosing an electrical system as set forth in
claim 18, wherein the data bus is a J1587 serial data bus.

21.   (Original) The system for diagnosing an electrical system as set forth in
claim 18, further including:

a vehicle pin connector, communicating with the data bus, which mates with the
pin connector of the remote diagnostic unit.

22.   (Original) The system for diagnosing an electrical system as set forth in
claim 18, wherein the standard diagnostic message indicates a fault status of the
electronic control unit.

23.   (Original) The system for diagnosing an electrical system as set forth in
claim 18, wherein the microcontroller includes a UART.

24.   (Original) The system for diagnosing an electrical system as set forth in
claim 18, wherein the data bus is a J1587 serial data bus.

25.   (Currently Amended) A method for remotely displaying a fault status of an electronic control unit on an associated vehicle, the method comprising:

determining the fault status of the electronic control unit;

transmitting a signal from the electronic control unit to ~~the data bus,~~ a data bus,

5   the signal indicating a standard message for identifying ~~a fault~~ the fault status of the electronic control unit;

receiving the signal into a remote diagnostic unit;

interpreting the signal as the standard message within the remote diagnostic unit; [[and]]

10   illuminating selected lights on the remote diagnostic unit as a function of the standard message; and [[message.]]

activating a reset switch for at least one of clearing the electronic control unit and causing the electronic control unit to enter a reconfiguration mode.

26.   (Original) The method for remotely displaying a fault status as set forth in claim 25, wherein the interpreting includes:

conditioning the signal into the standard message; and

identifying the fault status as a function of the standard message.

27.   (Original) The method for remotely displaying a fault status as set forth in claim 26, wherein:

the conditioning includes:

transforming the signal into the standard message in a circuit including

5   an RS485; and

the identifying includes:

identifying the fault status within a UART included within a microcontroller of the remote diagnostic unit.

28.   (Cancelled)

29.   (Currently Amended) The method for remotely displaying a fault status as set forth in ~~claim 28,~~ claim 25, wherein the reset switch is a magnetic switch, the activating including:

passing a magnet within a range for causing a response in the magnetic switch.

30.   (New) The remote diagnostic unit as set forth in claim 4, wherein the ECU is an ABS ECU.